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ABSTRACT

A study examined the nature and extent of the instruction, application, and practice in deriving word meanings from context in a variety of basal reading series. Seven major basal reading series at the fourth-grade level (published between 1986 and 1989 and readily available) were analyzed. Results indicated that: (1) the series differed considerably in the number of lessons they included at the fourth-grade level; (2) there seemed to be disagreement among the publishers as to when to emphasize the teaching of the use of context with unfamiliar words; (3) the series varied considerably in terms of how they presented the strategy; (4) only two series (Holt and Macmillan) had students apply the strategy to the selections they read; (5) the series varied in their use of "familiar" and "unfamiliar" words; and (6) the contexts used for practicing the strategy were not chosen carefully enough. Findings suggest that teaching of the appropriate strategies was often neglected and that there was only limited opportunity to apply the strategy in real reading situations with teacher direction. (Two tables of data are included; 18 references and a list of the basal series analyzed are attached.) (RS)

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HOW BASALS TEACH STRATEGIES TO DERIVE
WORD MEANINGS FROM CONTEXT

Teachers often consider that an important strategy in learning the meaning of new words is to use the naturally occurring contexts in which they are read. While there is some disagreement as to the effectiveness of this strategy (Schatz & Baldwin, 1986), many experts recommend that it be taught to students in some form (McKeown, 1985; Carnine, Kameenui, & Coyle, 1984). As consumers of basal reading series, we were concerned with the ways in which basals introduced and developed the strategy of learning word meaning from context. Our experiences in the classroom suggested that many students failed to develop an appropriate strategy for using context to puzzle out the meaning of unknown words. Vocabulary pertinent to reading selections was often being introduced in the basals using a definition and context procedure (Stahl, 1985). However, the skill or strategy of using context with new words while reading seemed to be neglected. Further, when use of context to determine meaning was taught, it appeared that new words were introduced in highly constrained contexts. Our concern, which gave rise to this investigation, was whether the instructional recommendations in basal teacher manuals and the practice given students were appropriate. In order to investigate whether our concerns were justified, we decided to examine various basals being used in classrooms.

Our study had three main questions. First, what was the nature and extent of the instruction, application, and practice in

deriving word meanings from context in a variety of basal reading series? We wanted to know if all basal publishers treated context clues in the same manner. We felt from informal conversations that some series provided more instruction and practice than others. We were unfamiliar with expert opinion on how contextual word meaning was best taught, and interested in whether instructional recommendations in the basals matched expert opinion.

Second, what was the nature of the words being used for this instruction? More specifically were the words familiar to students (Nagy, 1988), and were different parts of speech represented? It seemed logical to us that strategies to derive word meaning from context should be introduced with familiar words before the strategy was practiced with unfamiliar words. It seemed important, therefore, to find out whether this was indeed the sequence basals followed. Further, Dulin (1969) found that some types of context clues worked better for some parts of speech that others. In order to see if this issue was addressed, we wanted to find out if various parts of speech were represented in the corpus of words used in each series.

Our third question concerned the nature of the contexts used in the instruction. Researchers have classified clue types in a variety of ways (Ames, 1966; Dulin, 1969; Sternberg & Powell, 1983). Our feeling was that students should be introduced to several types of contexts, even if the particular clue types were not named in instruction. Stahl, Brozo, and Simpson (1987) agree that students profit most from uses they identify themselves, so we

questioned if different clue types were being used, and whether they differed in degree of informativeness. Beck, McKeown, & McCaslin (1983) found that contexts occurring in text selections do not reliably assist readers in discovering the meaning of unknown words. We were interested in whether the sentence contexts used for instruction were also unhelpful.

Materials

The basal reading series selected for analysis were those of seven major publishers: Harcourt Brace Jovanovich, 1987; Holt, Rhinehart & Winston, 1986; Houghton Mifflin, 1989; MacMillan, 1989; Riverside, 1986; Scott Foresman, 1988; and Silver Burdett & Ginn, 1989. These were series that were readily available to us in our schools, some being more recent than others. Analysis was focused at the fourth grade level, with notice made of previous and subsequent instruction. Fourth grade was chosen as being a level at which this strategy may be appropriately taught. At this level there is an increased emphasis on comprehension and an expansion in the volume of reading material. It is important, therefore, for fourth graders to learn how to independently determine word meaning from context.

The Nature of Instruction, Application, and Practice

How each basal series dealt with teaching the use of context clues was examined. We looked at recommended instructional procedures given prior to reading a selection, the practice of the skill during reading, and the reinforcement of the skill after reading. We noted the number of lessons which were specified as teaching the use of context. Each lesson was examined to see if determining word meaning was the main focus. The use of context to identify a word (i.e. as a decoding strategy) was not included. Neither was the use of context to disambiguate the meaning of homographs. While we recognized that these were related activities (especially the latter), we were mainly interested in how students learned to add the meaning of new words to their vocabulary, rather than in how to identify familiar words, or how to choose between two familiar meanings. We found that the series differed in the terminology they used. Some series noted specific clue types for the reader. For example Harcourt Brace Jovanovich (HBJ) talked about associations, comparisons, antonyms, and synonyms. However all series had the students focus on surrounding words and sentences. For example, Houghton Mifflin talked about using "the sense of the surrounding words." (p.94) We also found that the series we examined differed considerably in the number of lessons they included at this level (Table 1).

Include Table 1 about here

We looked at the number of lessons for each series at the third and fifth grade levels to see if particular series with few lessons at fourth grade, taught this strategy more comprehensively in the earlier or later grade. We found that Scott Foresman (SF) and MacMillan (MM) did not begin to teach the use of context clues until fourth grade. Scott foresman maintained abou the same number of lessons. MacMillan increased the emphasis through fifth grade. HBJ, Houghton Mifflin (HM), and Silver Burdett & Ginn (Gin) had approximately the same number of lessons at both third and fifth grades as they did at fourth grade. Riverside (RIV) concentrated on context with homophones and homographs at third grade, but included four lessons on context clues for new words at fifth grade. Holt, Rhinehart & Winston (Hol), as might be expected with their great emphasis on the strategy in fourth grade, had one lesson at the third and four lessons at the fifth grade levels. There seemed to be disagreement among the publishers as to when to emphasize the teaching of the use of context with unfamiliar words. However, we felt that in choosing fourth grade to study, we were not misrepresenting any publisher in terms of the extent and nature of instruction.

While the number of lessons was interesting, it did not account for exposure to learning and practicing the strategy. Obviously the lessons varied in length and exposure. Also of interest was each series' approach to teaching and practice. We felt the number of words used for teaching, applying, and practicing the strategy, and how they were used, would allow for comparisons between series which used different terminology.

The classification we developed to make these comparisons is shown in Table 1. We examined whether the words were presented by the teacher, whether they were part of practice exercises, or reinforcement in workbook pages, or other optional exercises. If presented by the teacher we looked at whether the words were introduced in an oral context or in a visual context. When the latter, we noted if the word appeared in a sentence alone, or in more extended text. When the students practiced the strategy, we looked at the nature of the practice and classified it in terms of having to write a meaning or having to choose between meanings presented.

As can be seen in Table 1, the series we examined varied considerably in terms of how they presented the strategy of learning new meanings from context. The number of words presented differed. Three series (SF, GIN, HOL) had a large number of words. For Scott Foresman and Silver Burdett & Ginn the large number was due to the many reinforcement activities. Holt had the most lessons, and the greatest number of words taught. Perhaps because of this, Holt was also the series that presented most words in

extended text. Our feeling was that students should have practice with extended text so that they could use information beyond the sentence level. Silver Burdett & Ginn was the only other series which did this to any extent.

When requesting the students to identify the meaning of a word in context, the basic option was to select from several alternative meanings for the word, or to write a meaning. The latter task is obviously more difficult, but more related to the task in normal reading in that it requires the student to produce a meaning. The majority of the series has a mix of writing meanings and choosing meanings, although Scott Foresman had children write their own meanings all the time, and Holt more frequently used the choice option. Slawson (1991), in reviewing context instruction in college texts, argues that questions accompanying practice need to be more consistently generative. We agree. From our perspective Scott Foresman provided the more appropriate activity.

Of particular concern to us was the lack of application in most series. Only Holt and MacMillan had students apply the strategy, with more than a few target words, to the selections they read. It appeared to us that it was inappropriate to introduce and practice a strategy and then to not apply it, or apply it rarely. Sternberg (1987) argues that children need to learn skills that are transferable to everyday tasks, and application is obviously a part of that process. If the basal text is the main source of reading in the classroom, then more extended application should be given.

We also compared the way the series recommended the strategy be taught with the recent recommendations of experts. Blachowicz and Zabroske (1990) and Herman and Weaver (1988) have developed similar recommendations for teaching the use of context to determine word meaning. Blachowicz and Zabroske recommend teaching students to look before the word, to look after the word, and to look at the word (for prefixes, roots, etc.). Herman and Weaver recommend teaching the students to "look in" (at the word), and to "look around". Other experts, writing in college methods texts (e.g. Durkin, 1983; Karlin and Karlin, 1987), recommend teaching specific clue types. Sternberg and Powell (1983) argue for the teaching of specific clue types but their classification system is unique in emphasizing a framework of temporal, spatial, value, stative, functional, class membership, causal, and equivalence cues. All of the series seem to follow systems based on emphasizing contexts in general, rather than specific clue types. Although it appears the experts do not agree on appropriate instruction, the basal series publishers seem to agree that teaching specific types of clues is not productive. We did not find recommendations from experts concerning the writing as opposed to the choosing of meanings (the advantages of a productive over a receptive task).

The Nature of the Words Used in Instruction

We were concerned that there should be some progression from

familiar to unfamiliar words in teaching the use of context to determine meaning. The likely familiarity of the words to the students was examined. Our reference for determining how familiar the words might be to students was The Living Word Vocabulary (Dale & O'Rourke, 1976). This book lists words known by at least two thirds of the students at grade levels 4, 6, 8, 10, and 12. For example, the word "wither" is listed as being known by 70 per cent of students in sixth grade. From this we know that less than 66 per cent of fourth graders know the meaning of this word. The percentage of target words used in the series that were likely to be familiar to students at each grade level are listed in Table 2.

Include Table 2 about here

Thus 46 per cent of the words used in Silver Burdett & Ginn at the fourth grade level would be known by 2/3 of fourth graders. However, 11 per cent of the words they used would probably be unfamiliar to most tenth graders. It can be seen that series varied in their use of 'familiar' and 'unfamiliar' words; two focused on the former (Ginn and Holt), two on the latter (Houghton Mifflin and MacMillan), and three used words spread

more evenly over grade levels (Table 2). There was no apparent order in which words were introduced, e.g. from familiar to unfamiliar. It appears that many of the words that series are asking students to identify by using context are ones that we would not expect them to learn meanings for until much later. This may be an impediment to learning the strategy of using context.

In terms of parts of speech, all series except one used more nouns than other parts of speech. Houghton Mifflin used more adjectives than noun and verbs. MacMillan and Riverside used fewer verbs than other series. HBJ, Houghton Mifflin, and Riverside included no adverbs, and the other series included adverbs as 3 per cent or less of the words. None of the series suggested alternative strategies with different parts of speech. If some types of clues are more helpful for certain parts of speech, as Dulin (1969) suggests, then this may be a mistake. It appears to us that in regard to adjectives the noun being qualified would be an obvious first place to look for more information as to meaning. However, we were unable to find any expert opinions regarding this question.

The Nature of Contexts Uses in Instruction

In order to determine if a variety of clue types was used, a selection of the contexts in which the words were presented was classified using a modified version of Dulin's scheme (1969).

The clue types were comparison/contrast, synonym or antonym, description or example, association or language experience, definition, and a catch all category (other) when the classification was uncertain. Each of the authors classified the contexts of approximately 30 per cent of the words which appeared in the teachers' manuals. Practice in the classification system was given until 80 per cent agreement was reached among all the authors. After classifying the contexts in a particular series, each rater's classification was checked by another rater. Disagreements were brought to the whole group for resolution. The most frequent type of context was a direct description or example, although the series varied in the proportion of each type used. For example, Silver Burdett & Ginn used synonyms cues for 33 per cent of the sentences compared to Holt's 8 per cent. The difficulty of classifying clue types was apparent from the number of contexts that were put in the "other" category. Over 56 per cent of Holt's sentences were categorized as "other", two series had over 30 per cent, and the lowest series was Sivler Burdett & Ginn with 11 percent. This seems to have implications for teaching clue types. If the majority of words which the children encounter are going to be in contexts of the "other" type, then perhaps a "look around" strategy is most appropriate. The other alternative is that these contexts were not helpful in determining meaning, which is why they were hard to categorize. If so, we wonder why they were being used for instruction. In order to explore how informative contexts were, practice

sentences where students had to choose from several meanings were examined for degree of informativeness.

A sample of fifteen practice sentences was prepared with target words and choices deleted. The sample included only those instances where students had to choose the meaning of the target word from several options. The sentences were selected randomly from each series that used this method. Thirty adults, who were not educators, were asked to identify the target word or its meanings. Non-educators were chosen as being less likely to be knowledgeable about this type of school task. The adults were also asked to rate on a three point scale how certain they were that they had correctly identified the meaning. Eight of the fifteen contexts enabled 75 per cent or more of the adults to identify the target word, or give a similar meaning. For seven words, the target was identified less than 10 per cent of the time. On all but two words, the degree of certainty expressed was appropriate. That is, success in identifying a word's meaning was matched, for these adult subjects, with a high degree of confidence in their success. Equally, they were justifiably less confident on those items when they actually failed to give a meaning that matched the deleted word's meaning. It seems that for these adults, the contexts enabled them to predict with reasonable accuracy the success they would have using the context. However, nearly half the contexts were unhelpful. We feel that the contexts used for practicing this strategy need to be more carefully chosen. It is also interesting that we saw no

attempt to teach the students to estimate how successful they might be in using context in normal reading situations. If, as Beck et alia (1983) suggest, many contexts are unhelpful, developing a metacognitive understanding of when the strategy has been successful would be an appropriate area of instruction. Slawson (1991) also argues for greater emphasis on the process of deriving meanings. Developing student's understanding and monitoring of that process should be the goal of instruction.

Conclusion

In general our suspicions regarding instruction in contextual word learning were confirmed. Teaching of the appropriate strategies was often neglected. More importantly, there was only limited opportunity to apply the strategy in real reading situations with teacher direction. Given the importance of using context to learn word meanings (Nagy & Anderson, 1984), it may be that additional time needs to be devoted to supplemental instruction. Some of our particular concerns were related to the use of familiar and unfamiliar words in instruction, and how they were sequenced. Further investigation is needed as to whether the same instruction is appropriate for all parts of speech.

We recognize that the procedures and materials in more recent basal series may be different. Nevertheless, publishers need to take care that practice sentences used in contextual word

learning are helpful, even when optional meanings are not present. We found adults struggled with a high proportion of those selected from this type of exercise. However, we also found that adults were generally aware when the context was unhelpful. It may be that this is an important awareness for students to develop, perhaps as part of metacognitive comprehension instruction.

We also recognize that the presentation of vocabulary before the reading of a selection is often done in a sentence context. Teachers can use this opportunity to teach context skills. We hope that many teachers actually do this, because the nature and extent of recommended instruction is otherwise problematic.

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Materials

Harcourt Brace Jovanovich, 1987

Holt, Rhinehart & Winston, 1986

Houghton Mifflin, 1989

MacMillan, 1989

Riverside, 1986

Scott Foresman, 1988

Silver Burdett & Ginn, 1989

Table 1
The number of words, and how and where they occur, in seven fourth grade basal reading series

		PUBLISHERS						
		SF	HBJ	MM	RIV	HM	GIN	HOL
NUMBER OF TARGET WORDS:		101	51	70	28	61	108	116
BEFORE READING:								
TEACHER								
ORAL			5	4		2		
VISUAL	- SENTENCE	15		5		7	14	
	- EXTENDED			4			4	
PRACTICE								
SENTENCE	- WRITE	40	6					3
	- CHOOSE			14		9		36
PARAGRAPH	- WRITE							
	- CHOOSE						8	16
DURING READING:								
NUMBER OF TARGET WORDS:			4	12		1		16
AFTER READING:								
TEACHER								
ORAL			4					3
VISUAL	- SENTENCE	9	18	5	4	4	20	6
	- EXTENDED					4		
PRACTICE								
SENTENCE	- WRITE	4	7	10	11	20	14	
	- CHOOSE						4	21
PARAGRAPH	- WRITE						6	
	- CHOOSE		4					10
REINFORCEMENT:								
SENTENCE	- WRITE	33				4	15	
	- CHOOSE		3	16	7	10	23	4
NUMBER OF LESSONS:		5	6	9	3	2	7	14

Table 2
The percentage of words* determined to be at each grade level** in the fourth grade level books of seven basal series

	PUBLISHERS						
GRADE	SF	HBJ	MM	RIV	HM	GIN	HOL
4	30	25	8	32	4	46	42
6	39	20	24	36	28	19	31
8	9	14	22	18	19	13	10
10	9	14	14	5	17	5	3
Older	10	25	30	9	32	11	9
Not Listed	3	2	2	0	0	5	4

* Used to teach use of context to determine word meaning
** According to The Living Word Vocabulary (Dale & O'Rourke, 1976)